UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,862	08/09/2001	A. C. McQuaide JR.	00984	3811

45695 7590 03/24/2006

WITHERS & KEYS FOR BELL SOUTH
P. O. BOX 71355
MARIETTA, GA 30007-1355

EXAMINER	
TIEU, BINH KIEN	

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/925,862	MCQUAIDE ET AL.	
	Examiner	Art Unit	
	BINH K. TIEU	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,9-11,15-17,24-32 and 36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,9-11,15-17,24-32 and 36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicants' amendment filed on 09/06/2005 was entered. Applicants' remarks filed on 02/06/2006 correctly argued that the filing date of the cited reference Coppage (US Pat. #: 6,741,687) is March 04, 2002 which was after the filing date of present applicant on August 09, 2001. Therefore, the previous Office Action is withdrawn. However, new reference, Adams et al. (Pub. No.: US 2001/0028705 A1) has filing date prior to the present application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (Pub. No.: US 2001/0028705 A1) in view of Laybourn et al. (U.S. Pat. #: 6,480,710 **as cited in *the previous Office Action***).

Regarding claim 1, Adams et al. ("Adams") teaches a communications system, having a prepaid architecture for managing a plurality of prepaid accounts for communication services, wherein each prepaid account is associated with a prepaid subscriber (i.e., communication system as shown in figure 2), comprising:

a communication network including a switch, in communication with a telecommunications device, the device for remotely managing at least one of the prepaid accounts (see paragraph [0033]);

a wide area network including (i.e., Data Network 22 as shown in figure 1 and 1A);

a prepaid account database for storing records assigned to subscribers of prepaid communications service (i.e., prepaid account 39 stored in the Database 37);

a prepaid application module for initializing and updating the prepaid accounts for determining a current account balance while the prepaid communications service is in use by a subscribers for comparing the current account balance to a recharge threshold, and for generating alerts once the current account balance falls below the recharge threshold while the prepaid communications service is in use. And wherein the prepaid application module decreases an amount of time from one alert to a subsequent alert as the current account balance continues to fall during use of the prepaid communications service (see paragraph [0034]); and

a prepaid server (i.e., Host Computer 25) coupled to the prepaid account database and the prepaid application module (col.6, lines 11-22); and

a gateway (i.e., Node 35A) in communication with the switch of the telecommunications network and in communication with the wide area network to deliver the alerts to the telecommunications device (see paragraphs [0024] and [0025]).

It should be noticed that Adams failed to clearly teach the prepaid telecommunications services to be applied to wireless devices in wireless communications network and a web site included a banking institution, a debit company or a credit card transaction server, coupled to a credit card database, for checking available credit and for refilling the prepaid account. However, Laybourn et al. ("Laybourn") teaches such features in col.7, lines 6-59 for a purpose of processing payment authorization and clearing payments.

Therefore, it would have been obvious to one of ordinary skill in the art the time the invention was made to incorporate the use of the feature of a credit card transaction server coupled to a credit card database, for checking available credit, as taught by Laybourn, into view of Adams in order to process payment authorization and to clear payments for the refills.

Regarding claim 2, Adams further teaches the subscriber remotely updating the prepaid account via a web site and the subscriber's prepaid account is automatically managed and updated with the refills (see paragraphs [0035]-[0036]).

5. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adams et al. (Pub. No.: US 2001/0028705 A1) in view of Laybourn et al. (U.S. Pat. #: 6,480,710) as applied to claims 1-2 above, and further in view of Koch et al. (Pub. No.: US 2003/0002634 A1).

Regarding claims 3-5, Adams and Laybourn, in combination, fails to clearly teach the feature of wireless Application Protocol (WAP) to apply into wireless network so that to enable

wireless terminals, base stations and gateways to transceive text-based and/or voice based content. However, Koch et al. ("Koch") teaches such limitations in paragraph [0008] for a purpose of integrating components of a telephone system and existing and new Internet components to deliver voice-based content to Wap-enable wireless device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the feature of wireless Application Protocol (WAP) to apply into wireless network, as taught by Koch, into view of Adams and Laybourn in order to deliver voice-based content to Wap-enable wireless device.

6. Claims 9-11, 24-29, 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laybourn et al. (U.S. Pat. #: 6,480,710) in view of Suryanarayana et al. (U.S. Pat. #: 6,487,401) ***also cited in previous Office Action***), and further in view of Adams et al. (Pub. No.: US 2001/0028705 A1).

Regarding claim 9, Laybourn teaches a prepaid communication system in (see Fig.1) for providing wireless access to a network for a prepaid account; coupling a wireless device to the network;

collecting a credit card account information from the prepaid subscriber through the network by the subscriber entering the credit card number into the wireless device in (see col.6, lines 9-28 and col.7, lines 17-59);

establishing the prepaid account on a subscriber data aid receiving a prepaid amount and checking the credit card account for available credit in (see col.7, lines 17-59).

Laybourn teaches an TCP/IP network through which a subscriber can connect to recharge or update one's account but fails to teach being implicitly being able to recharge an account using a WAP and automatic recharge.

Suryanarayana et al. ("Suryanarayana") teaches a prepaid wireless telephone account regeneration in a wireless protocol system in (see col.4, lines 47-57 and col. 7) that a user can enter an amount he wants, an account recharged by, which can be pre-stored or be done in time to a credit card account or any accounts authorized by the subscriber.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Suryanarayana et al. into that of the combination thus giving mobile telephone users access to the internet in (see col.1 of Suryanarayana) and being able to update one's balance regardless of geographical location, an advantage in areas where it would have been a toll call to call a number to update one's account, to be able to recharge an account automatically without having to repeat the process over and over which saves user's time or in case where a user might not have enough money, control a recharge based on current available funds.

It should be further noticed that Laybourn and Suryanarayana, in combination, fails to clearly teach the features of determining a current account balance while the prepaid communications service is in use by a subscriber, comparing the current account balance to a recharge threshold, and pushing alerts to the wireless device once the current account balance falls below the recharge threshold while the prepaid communications service is in use, and wherein the prepaid application module decreases an amount of time from one alert to a

subsequent alert as the current account balance continues to fall during use of the prepaid communications service, as amended and argued by the Applicants in their remarks. However, Adams teaches such features in paragraph [0034] for a purpose of providing prepaid calling call and refill services to prepaid account in the telecommunications network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Adams into view of Laybourn and Suryanarayana in order to provide prepaid calling call services with refills service to prepaid accounts in wireless communications network.

Regarding claims 10-11, Suryanarayana further teaches limitations of the claims in col.4, lines 4-12.

Regarding claims 24 and 36, see the explanation regarding claim 9 because the claimed method steps would be performed by the claimed apparatus.

Regarding claims 25-27 and 29, the combination including Suryanarayana further teaches the claimed subject matter in col.4 and the figures.

Regarding claim 28, it's known to send a low frequency tone to inform a user of the fact that account balance is nearing a threshold or should be recharged during a call and the examiner takes official notice to this effect.

7. Claims 15 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raith et al. (U.S. Pat. #: 6,493,547) in view of Adams et al. (U.S. Pat. #: 6,181,785) (***both references were also cited in the previous Office Action***), and further in view of Adams et al. (Pub. No.: US 2001/0028705 A1).

Regarding claim 15, Raith teaches a method an apparatus for providing usage information in wireless communication systems comprising:

providing wireless access to a network which manages a prepaid account based on usage and upon receiving an indication that a communication session with the wireless terminal has ended, sending cumulative message which could include current usage and past usage information as stored to a prepaid subscriber in (see col.4, col.6, lines 5-20, col.8, lines 61-67) but fails to teach the step of querying.

It's well known to query an account to determine how much balance is available for calls and so forth.

Adams et al. ("Adams *'785*") teaches a communication system wherein charge data can be sent to a user after a call by querying a network element for this information in (see fig. 4) after call termination.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Adams *'785* into that of Raith thus making it possible to query a database for charge data as stored after a call to get accurate information as stored in the database for billing purposes and discrepancy purposes and to budget and plan future calls in (see col.1, lines 53-55 of Adams reference).

It should be further noticed that Adams *'785* and Raith, in combination, fails to clearly teach the features of pushing alerts to the wireless device during the communication session once the current account balance falls below the recharge threshold amount, and an amount of time from one alert to a subsequent alert is decreased as the current account balance continues to fall during communications session, as amended and argued by the Applicants in their remarks.

However, Adams *'705* teaches such features in paragraph [034] for a purpose of providing prepaid calling call and refill services to prepaid account in wireless communications network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Adams *'705* into view of Raith and Adams *'785* in order to provide prepaid calling call services with refills service to prepaid accounts in wireless communications network.

Regarding claim 30, see the explanation regarding claim 15 because the claimed method steps would be performed by the claimed apparatus.

8. Claims 16-17 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raith et al. (U.S. Pat. #: 6,493,547) in view of Adams et al. (U.S. Pat. #: 6,181,785) and of Adams et al. (Pub. No.: US 2001/0028705 A1) as applied to claim 15 above, and further in view of Suryanarayana et al. (U.S. Pat. #: 6,487,401).

Regarding claims 16-17, the combinations fail to teach the claimed limitations implicitly as taught by Suryanarayana. Suryanarayana teaches a prepaid wireless telephone account regeneration in a wireless protocol system in (see col.4, lines 47-57 and col.7) that a user can enter an amount he wants, an account recharged by, which can be pre-stored or be done in time to a credit card account or any account. Suryanarayana et al. teaches being able to notify a user of a need for a recharge in (see col.4, lines 4-17) can be done at any time during a call, a possibility.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Suryanarayana into that of the combination

thus giving mobile telephone users access to the internet in (see col.1 of Suryanarayana) and being able to update one's balance regardless of geographical location, an advantage in areas where it would have been a toll call to call a number to update one's account and to be able to receive prepaid services for thus who might not have easy access to telephones in remote areas.

Regarding claims 31-32, see the explanation above.

Response to Arguments

9. Applicant's arguments with respect to claims 1-5, 9-11, 15-17, 24-32 and 36 have been considered but are moot in view of the new ground(s) of rejection.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (571) 272-7510 and E-mail address: BINH.TIEU@USPTO.GOV.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (571) 272-7499 and **IF PAPER HAS BEEN MISSED FROM THIS OFFICIAL ACTION PACKAGE, PLEASE CALL Customer Service at (703) 306-0377 FOR THE SUBSTITUTIONS OR COPIES**.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington, D.C. 20231
Or faxed to:
(571) 273-8300
Hand Carry Deliveries to:
Customer Service Window
(Randolph Building)
401 Dulany Street
Alexandria, VA 22314

In formation regarding the status of an application may be obtained from the Patent Application Information Retrieval (FAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the FAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BINH TIEU
PRIMARY EXAMINER

Art Unit 2643

Date: March 20, 2006